Amendments to the Claims

1. (previously presented) The method of claim 12 further comprising converting the multimedia item's modality into the desired modality.

2. (previously presented) The method according to claim 1, wherein the one or more media resources are one or more resources of a network or terminal to which the multimedia item is provided in the desired modality.

3. (previously presented) The method according to claim 1, wherein the content value specifications are obtained from content value curves and scale factors for said modalities.

4. (previously presented) The method according to claim 3, wherein selecting the desired modality comprises:

obtaining conversion boundaries using the content value curves and scale factors for the modalities; and

determining the desired modality using the conversion boundaries.

5. (previously presented) The method according to claim 4, wherein the conversion boundaries are resource values at which the content value curves associated with overlapping sets intersect with each other.

6. (currently amended) In a system for processing multimedia contents, a method for selecting a desired modality from a plurality of modalities each of which is adoptable by a multimedia item as an alternative to any other modality of the plurality of modalities, the desired modality being for adopting the multimedia item to one or more media resources, the method comprising:

(1) for each said modality, obtaining a content value specification associated with a set of one or more resource values each of which is a value of the one or more media resources, the content value specification providing a content value for each of said one or more resource values in the associated set, wherein the sets associated with at least two of the modalities overlap;

(2) obtaining a resource value v1 belonging to at least two of the sets; and

(3) selecting the desired modality from the modalities whose associated sets contain the resource value v1, the desired modality being selected using the content value specifications of the modalities whose associated sets contain the resource value v1;

wherein the method further comprises, after operation (3), converting the multimedia item's modality into the desired modality;

wherein the content value specifications are obtained from content value curves and scale factors for said modalities;

wherein each of the content value ~~curves~~ **specifications** is obtained by combining ~~content value curves~~ **quality curves** that are measured according to two or more different qualities.

7. (previously presented) An apparatus for performing the method of claim 12.

8. (previously presented) An apparatus for performing the method of claim 1.

9. (previously presented) An apparatus for performing the method of claim 2.

10. (previously presented) An apparatus for performing the method of claim 13.

11. (previously presented) An apparatus for performing the method of claim 3.

12. (previously presented) The method of claim 20 wherein the sets associated with at least two of the modalities overlap; and

the desired modality is selected using the content value specifications of the modalities whose associated sets contain the resource value v1.

13. (previously presented) The method of claim 24 wherein the sets associated with at least two of the modalities overlap; and

the method further comprises:

determining, from the content value specifications, sub-sets of said sets, wherein for each said sub-set, one of the content value specifications provides a maximum content value for each resource value in the sub-set, wherein the modality associated with said one of the content value specifications is the desired modality for each resource value in the sub-set;

wherein at least one of the sub-sets includes a resource value belonging to at least two of said sets.

14. (previously presented) The method of claim 12 wherein for each modality, the associated content value specification is a scaled content value specification equal to a product of a preliminary content value specification and a scale factor, and the content value specifications are defined by the preliminary content value specifications and the scale factors.

15. (previously presented) The method of claim 12 wherein at least two content value specifications associated with sets containing the resource value v1 provide respective different content values for the resource value v1, and the desired modality is associated with the content value specification which provides the greatest content value for the resource value v1.

16. (previously presented) The method of claim 13 wherein determining the sub-sets comprises determining boundary resource values which are resource values at which at least two content value specifications provide equal content values, said boundary resource values comprising one or more boundaries of one or more sub-sets.

17. (previously presented) The method of claim 13 wherein for each modality, the associated content value specification is a scaled content value specification equal to a product of a preliminary content value specification and a scale factor, and the content value specifications are defined by the preliminary content value specifications and the scale factors.

18. (previously presented) In a system for processing multimedia contents, a method for building an overlap content model for a multimedia item which is available in any one of a plurality of alternative modalities, the overlap content model being for providing a desired modality from the plurality of modalities in response to a resource value which is a value of one or more media resources, the method comprising:

(1) for each said modality, obtaining a content value specification associated with a set of one or more resource values each of which is a value of the one or more media resources, the content value specification providing a content value for each of said one or

more resource values in the associated set, wherein the sets associated with at least two of the modalities overlap;

(2) determining, from the content value specifications, sub-sets of said sets, wherein for each said sub-set, one of the content value specifications provides a maximum content value for each resource value in the sub-set, wherein the modality associated with said one of the content value specifications is the desired modality for each resource value in the sub-set;

wherein at least one of the sub-sets includes a resource value belonging to at least two of said sets;

wherein at least one said content value specification is obtained by combining quality specifications associated with respective different qualities, each quality specification providing, for each resource value in the associated set, a content value based on the respective quality.

19. (previously presented) The method of claim 18 wherein for at least said one content value specification, the associated quality specifications are scaled quality specifications, and said one content value specification is obtained from a sum of the scaled quality specifications.

20. (previously presented) In a system for processing multimedia contents, a method for selecting a desired modality from a plurality of modalities each of which is adoptable by a multimedia item as an alternative to any other modality of the plurality of modalities, the desired modality being for adopting the multimedia item to one or more media resources, the method comprising:

(1) the system obtaining data which define, for each said modality, a content value specification associated with a set of one or more resource values each of which is a value of the one or more media resources, the content value specification providing a content value for each of said one or more resource values in the associated set;

wherein for at least one modality which is one of said modalities, the associated content value specification depends on each of a plurality of quality specifications that are different from each other, wherein each quality specification associates each resource value

in the content value specification's associated set with a quality-specific content value for the modality, the associated set comprising a plurality of resource values;

wherein for at least said one modality, the data defines the quality specifications to define the associated content value specification;

(2) the system obtaining a resource value v1 belonging to at least one of the sets; and

(3) the system selecting the desired modality from said modalities, the desired modality's content value specification's associated set containing the resource value v1.

21. (previously presented) The method of claim 20 wherein for at least said one modality, the data defines a scale factor for each said quality specification, wherein the associated content value specification is defined by the quality specifications and the corresponding scale factors.

22. (previously presented) The method of claim 21 wherein for at least said one modality, the associated content value specification is defined by the sum of the quality specifications scaled by the corresponding scale factors.

23. (previously presented) The method of claim 21 further comprising transmitting the multimedia item in the desired modality over a network to a recipient.

24. (previously presented) The method of claim 20 further comprising transmitting the multimedia item in the desired modality over a network to a recipient.

25. (previously presented) The method of claim 20 wherein one of the quality specifications is defined by PSNR (Peak Signal to Noise Ratio).

26. (previously presented) The method of claim 25 wherein another one of said quality specifications is defined by Mean Opinion Score (MOS).

27. (previously presented) An apparatus for performing the method of claim 18.

28. (previously presented) An apparatus for performing the method of claim 19.

29. (previously presented) An apparatus for performing the method of claim 20.

30. (previously presented) An apparatus for performing the method of claim 24.

31. (currently amended) A method of converting a modality of multimedia contents to support Quality of Service (QoS) of the multimedia contents according to media resources, comprising the steps of:

receiving a modality conversion descriptor in which characteristics of modality conversion of the multimedia contents are described;

receiving the multimedia contents; and

converting the modality of the multimedia contents into a modality that is determined according to a media resource and the modality conversion descriptor,

wherein the modality conversion descriptor describes ~~a modality~~ modalities of the media resource, a scale factor for ~~the modality~~ each of the modalities of the media resource, and for each modality describes a plurality of quality curves ~~for the modality of the media resource,~~ and a scale factor for each quality curve, wherein for each modality the corresponding quality curves and the scale factors define a content value curve for the modality of the media resource.

32. (previously presented) The method according to claim 31, wherein the media resource is a network or terminal to which the multimedia contents are provided.

33. (previously presented) The method according to claim 31, wherein converting the modality comprises:

obtaining conversion boundaries using the content value curves and scale factors for the modalities;

determining an optimal modality for the media resource using the conversion boundaries; and

converting the multimedia contents into the determined optimal modality.

34. (previously presented) The method according to claim 33, wherein the conversion boundaries are values of the media resource corresponding to intersection points where the content value curves intersect with each other when the content value curves for the modalities overlap with each other according to the scale factors.

35. (currently amended) The method according to claim 31, wherein each of the content value curves is obtained by combining ~~content value~~ quality curves that are measured according to two or more different qualities.

36. (currently amended) An apparatus for converting a modality of multimedia contents to support QoS of the multimedia contents according to media resources, comprising:

means for receiving a modality conversion descriptor in which characteristics of modality conversion of the multimedia contents are described; and

means for converting the modality of the multimedia contents into a modality that is determined according to a media resource and the modality conversion descriptor,

wherein the modality conversion descriptor describes ~~a modality~~ modalities of the media resource, a scale factor for ~~the modality~~ each of the modalities of the media resource, and for each modality describes a plurality of quality curves ~~for the modality of the media resource~~, and a scale factor for each quality curve, wherein for each modality the corresponding quality curves and the scale factors define a content value curve for the modality of the media resource.

37. (previously presented) The apparatus according to claim 36, wherein the modality conversion means comprises:

means for obtaining conversion boundaries using the content value curves and scale factors for the modalities; and

means for converting the modality of the multimedia contents into the determined optimal modality.

38. (previously presented) The apparatus according to claim 37, wherein the conversion boundaries are values of the media resource corresponding to intersection points where the content value curves intersect with each other when the content value curves of the modalities overlap with each other according to the scale factors.

39. (currently amended) The apparatus according to claim 36, wherein each of the content value curves is obtained by combining ~~content value~~ quality curves that are measured according to two or more different qualities.